

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled MODIFIED RIBOZYMES

_____ the specification of which
_____ is attached hereto.

x was filed on 23rd September 1991 as Application

Serial No. PCT/EP91/01811 and was amended on _____

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<u>PCT/EP90/01731</u>	<u>PCT</u>	<u>12 OCTOBER 1990</u>	<u>x</u>	
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
_____	_____	_____	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
_____	_____	_____	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Richard J. Warburg, Esq.,
Registration No. 32,327.

Kindly recognize as associate attorney: Roland N. Smoot, Reg. No. 18,718; Conrad R. Solum, Jr., Reg. No. 20,467; James W. Geriak, Reg. No. 20,233; Robert M. Taylor, Jr., Reg. No. 19,848; Samuel B. Stone, Reg. No. 19,297; Douglas E. Olson, Reg. No. 22,798; Robert E. Lyon, Reg. No. 24,171; Robert C. Weiss, Reg. No. 24,939; William E. Thomson, Jr., Reg. No. 20,719; Richard E. Lyon, Jr., Reg. No. 26,300; John D. McConaghy, Reg. No. 26,773; William C. Sieffin, Reg. No. 26,811; Coe A. Bloomberg, Reg. No. 26,605; J. Donald McCarthy, Reg. No. 25,119; John M. Benassi, Reg. No. 27,483; James H. Shalek, Reg. No. 29,749; Allan W. Janson, Reg. No. 29,395; Robert W. Dickerson, Reg. No. 29,914; Roy L. Anderson, Reg. No. 30,240; David B. Murphy, Reg. No. 31,125; James C. Brooks, Reg. No. 29,898; Jeffrey M. Olson, Reg. No. 30,790; Steven D. Hemminger, Reg. No. 30,755; Jerrold B. Rolly, Reg. No. 32,293; and Suzanne L. Biggs, Reg. No. 30,158 of LYON & LYON, 611 West Sixth Street, Los Angeles, California 90017, Telephone (619) 552-8400.

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Full name of sole or first inventor FRITZ ECKSTEIN

Inventor's signature Fritz Eckstein Date: 28.07.93

Residence Holundersteg 6, Gottingen W-3400, GERMANY

Citizenship GERMANY

Post Office Address Holundersteg 6, Gottingen W-3400, GERMANY

ADDITIONAL INVENTORS

Full name of inventor WOLFGANG PIEKEN
Inventor's signature _____ Date: _____
Residence 2860 Wilderness Place, Boulder, CO 80301, USA
Citizenship GERMANY
Post Office Address 2860 Wilderness Place, Boulder, CO 80301, USA

Full name of inventor FRITZ BENSELER
Inventor's signature Fritz Benseler Date: 29.7.93
Residence Neuendorfer Str. 14, D-37130 Gleichen/Etzborn, GERMANY
Citizenship GERMANY
Post Office Address Neuendorfer Str. 14, D-37130 Gleichen/Etzborn, GERMANY

Full name of inventor DAVID B. OLSEN
Inventor's signature _____ Date: _____
Residence WP44-B122, West Point, PA 19486, USA
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Full name of inventor DAVID M. WILLIAMS
Inventor's signature _____ Date: _____
Residence 82 Mill End Road, Cherry Hinton, Cambridge CB1 4JP, ENGLAND
Citizenship BRITISH
Post Office Address 82 Mill End Road, Cherry Hinton, Cambridge CB14JP, ENGLAND

ADDITIONAL INVENTORS

Full name of inventor CLAF HEINDENREICH 28.7.93 O.ief
Inventor's signature *Claf Heindenreich* Date: 28.7.93
Residence Karolinenweg 15, Gottingen W-3400, GERMANY
Citizenship GERMANY
Post Office Address Karolinenweg 15, Gottingen W-3400, GERMANY

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Full name of inventor OLAF HEINDENREICH
Inventor's signature _____ Date: _____
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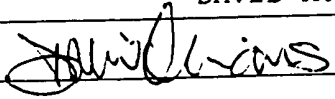
FRITZ BENSELER

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Citizenship GERMANY
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DAVID B. OLSEN

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Inventor's signature _____ Date: _____
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Citizenship USA
Post Office Address WP 44-B122, West Point, PA 19486, USA

DAVID M. WILLIAMS

Full name of inventor _____
Inventor's signature  Date: 28th July 1993
Residence 82 Mill End Road, Cherry Hinton, Cambridge CB1 4JP, ENGLAND
Citizenship BRITISH
Post Office Address 82 Mill End Road, Cherry Hinton, Cambridge CB14JP, ENGLAND

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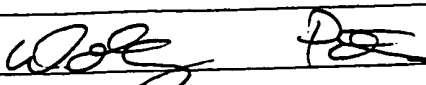
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Docket No. _____

ASSIGNMENT

WHEREAS the undersigned [hereinafter (collectively)
"ASSIGNOR"] have invented certain new and useful improvements in

(Title of
Application)

Modified Ribozymes

for which an application for United States Letters Patent was
executed concurrently herewith unless otherwise indicated.

WHEREAS
(Name and address
of Assignee)

Max-Planck-Gesellschaft zur Förderung der
Wissenschaften e.V.
Bunsenstraße 10
W-3400 Göttingen

a German corporation (hereinafter "ASSIGNEE") is
desirous of acquiring the entire right, title and interest in the
same:

Now, therefore, in consideration of the sum of one dollar
(\$1.00), the receipt whereof is hereby acknowledged, and other
good and valuable consideration, the said ASSIGNOR hereby sells,
assigns and transfers unto said ASSIGNEE, full and exclusive
right to the said invention in the United States and the entire
right, title and interest in and to any and all Letters Patent
which may be granted therefor.

Said ASSIGNOR hereby authorizes and requests the
Commissioner of Patents and Trademarks to issue said Letters
Patent to said ASSIGNEE, as the assignee of the entire right,
title, and interest in and to the same, for the sole use and for
the use of its successors, legal representatives, and assigns, to
the full end of the term for which said Letters Patent may be
granted, as fully and entirely as the same would have been held
by said ASSIGNOR had this assignment and sale not been made.

Witness, the hand and seal of the ASSIGNOR on the date(s)
indicated.

Date(s)

08.10.9208.10.9208.10.9208.10.92

Signature(s)

F. Eckstein

F. Eckstein

Wolfgang Pieken

Wolfgang Pieken

Fritz Benseler

Fritz Benseler

David B. Olsen

David M. Williams

Olaf Heidenreich

Olaf Heidenreich

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(Title of
Application)

Modified Ribozymes

for which an application for United States Letters Patent was
executed concurrently herewith unless otherwise indicated.

WHEREAS
(Name and address
of Assignee)

Max-Planck-Gesellschaft zur Förderung der
Wissenschaften e.V.
Bunsenstraße 10
W-3400 Göttingen

a German corporation (hereinafter "ASSIGNEE") is
desirous of acquiring the entire right, title and interest in the
same:

Now, therefore, in consideration of the sum of one dollar
(\$1.00), the receipt whereof is hereby acknowledged, and other
good and valuable consideration, the said ASSIGNOR hereby sells,
assigns and transfers unto said ASSIGNEE, full and exclusive
right to the said invention in the United States and the entire
right, title and interest in and to any and all Letters Patent
which may be granted therefor.

Said ASSIGNOR hereby authorizes and requests the
Commissioner of Patents and Trademarks to issue said Letters
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title, and interest in and to the same, for the sole use and for
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indicated.

Date(s)

08.10.92

Signature(s)

F. Eckstein

F. Eckstein

Wolfgang Pieken08.10.92Fritz Benseler

Fritz Benseler

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Date(s)

08.10.92

Signature(s)

F. Eckstein

F. Eckstein

Wolfgang Pieken

07.10.92

Fritz Benseler

Fritz Benseler

David B. Olsen

08.10.92

David M. Williams

David M. Williams

08.10.92

Olaf Heidenreich

Olaf Heidenreich

ASSIGNMENT

WHEREAS the undersigned [hereinafter (collectively)
"ASSIGNOR"] have invented certain new and useful improvements in

(Title of Application) Modified Ribozymes

for which an application for United States Letters Patent was
executed concurrently herewith unless otherwise indicated.

WHEREAS
(Name and address
of Assignee)

Max-Planck-Gesellschaft zur Förderung der
Wissenschaften e.V.
Bunsenstraße 10
W-3400 Göttingen

a German corporation (hereinafter "ASSIGNEE") is
desirous of acquiring the entire right, title and interest in the
same:

Now, therefore, in consideration of the sum of one dollar
(\$1.00), the receipt whereof is hereby acknowledged, and other
good and valuable consideration, the said ASSIGNOR hereby sells,
assigns and transfers unto said ASSIGNEE, full and exclusive
right to the said invention in the United States and the entire
right, title and interest in and to any and all Letters Patent
which may be granted therefor.

Said ASSIGNOR hereby authorizes and requests the
Commissioner of Patents and Trademarks to issue said Letters
Patent to said ASSIGNEE, as the assignee of the entire right,
title, and interest in and to the same, for the sole use and for
the use of its successors, legal representatives, and assigns, to
the full end of the term for which said Letters Patent may be
granted, as fully and entirely as the same would have been held
by said ASSIGNOR had this assignment and sale not been made.

Witness, the hand and seal of the ASSIGNOR on the date(s)
indicated.

Date(s)

08.10.92

Signature(s)

F. Eckstein

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Wolfgang Pieken

08.10.92

Fritz Benseler

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David B. Olsen

David M. Williams

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Olaf Heidenreich

Olaf Heidenreich

COMBINED DECLARATION AND POWER OF ATTORNEY

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invention entitled MODIFIED RIBOZYMES

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I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Richard J. Warburg, Esq.,
Registration No. 32,327.

Kindly recognize as associate attorney: Roland N. Smoot, Reg. No. 18,718; Conrad R. Solum, Jr., Reg. No. 20,467; James W. Geriak, Reg. No. 20,233; Robert M. Taylor, Jr., Reg. No. 19,848; Samuel B. Stone, Reg. No. 19,297; Douglas E. Olson, Reg. No. 22,798; Robert E. Lyon, Reg. No. 24,171; Robert C. Weiss, Reg. No. 24,939; William E. Thomson, Jr., Reg. No. 20,719; Richard E. Lyon, Jr., Reg. No. 26,300; John D. McConaghy, Reg. No. 26,773; William C. Steffen, Reg. No. 26,811; Coe A. Bloomberg, Reg. No. 26,605; J. Donald McCarthy, Reg. No. 25,119; John M. Benassi, Reg. No. 27,483; James H. Shalek, Reg. No. 29,749; Allan W. Janson, Reg. No. 29,395; Robert W. Dickerson, Reg. No. 29,914; Roy L. Anderson, Reg. No. 30,340; David B. Murphy, Reg. No. 31,125; James C. Brooks, Reg. No. 29,898; Jeffrey M. Olson, Reg. No. 30,790; Steven D. Hemminger, Reg. No. 30,755; Jerrold B. Rally, Reg. No. 32,293; and Suzanne L. Biggs, Reg. No. 30,158 of LYON & LYON, 611 West Sixth Street, Los Angeles, California 90017, Telephone (619) 552-8400.

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Full name of sole or first inventor FRITZ ECKSTEIN

Inventor's signature _____ Date: _____

Residence Holundersteg 6, Gottingen W-3400, GERMANY

Citizenship GERMANY

Post Office Address Holundersteg 6, Gottingen W-3400, GERMANY

ADDITIONAL INVENTORS

Full name of inventor WOLFGANG PIEKEN
Inventor's signature _____ Date: _____
Residence 2860 Wilderness Place, Boulder, CO 80301, USA
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Post Office Address 2860 Wilderness Place, Boulder, CO 80301, USA

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Post Office Address Neuendorfer Str. 14, D-37130 Gleichen/Etzborn, GERMANY

Full name of inventor DAVID B. OLSEN
Inventor's signature David B Olsen Date: 7/27/93
Residence WP44-B122, West Point, PA 19486, USA
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Post Office Address WP 44-B122, West Point, PA 19486, USA

Full name of inventor DAVID M. WILLIAMS
Inventor's signature _____ Date: _____
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Inventor's signature _____ Date: _____
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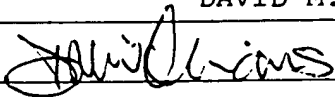
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Inventor's signature  Date: 28th July 1993
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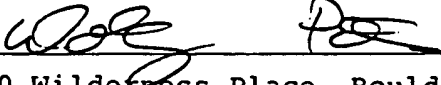
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Inventor's signature

Fritz Eckstein

Date:

23.09.93

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